



TENNESSEE BUREAU OF INVESTIGATION

Forensic Services Division

Violent Crime Response Team Standard Operating Procedures Examination of a Vehicle

10. VCRT Procedures

10.25 Examination of a Vehicle

10.25.1 Scope

VCRT Members may be asked to process a vehicle for physical evidence relating to a specific crime or crime scene. The vehicle can be part of a crime scene or a crime scene all to itself. The evidence located inside or on the exterior of a vehicle may be instrumental in solving the investigation or identifying specific suspects involved. The VCRT Members will organize a systematic approach and method to ensure that the entire vehicle is searched and all potential evidence is located, documented, and collected.

10.25.2 Definitions

Refer to VCRT 11.0 Definitions and Abbreviations

10.25.3 Chemicals and Reagents

Discipline-specific chemical and reagents

10.25.4 Equipment and Supplies

Camera

Note taking supplies

Discipline-specific equipment

10.25.5 Procedure

It is preferred that vehicles be processed at the Laboratory or in a controlled environment.

Prior to processing a vehicle, it is necessary to determine if consent to search or a search warrant is needed and what parameters are in place (i.e., time frame allowed by the warrant, etc). Proper legal access shall always be established prior to the search or seizure of evidence from a vehicle. If legal access cannot be immediately granted, the vehicle should be towed and stored, preferably inside, until the necessary warrant or consent can be obtained. If the vehicle is towed to the Laboratory or stored at another site for future processing, be sure that all doors and windows are secured, if possible, and that all individuals handling the vehicle, including tow truck drivers, are careful to avoid damaging or altering trace evidence, including fingerprints.



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Photographs shall be taken of the vehicle. If processed at the scene, overall photographs shall include a reference landmark establishing the vehicle's location and shall demonstrate the vehicle's relationship to the primary scene, when possible. Photographs shall be taken of the vehicle exterior to note the condition and direction of the vehicle:

- Photographs should be taken from all four (4) angles and all four (4) corners of the vehicle
- Close-up photographs should be taken of the license plate and VIN
- Close-up photographs shall be taken of any bullet impact points or physical evidence observed on the exterior of the vehicle

Any damage should be examined for potential paint transfer evidence. If paint transfer evidence is noted, a paint transfer sample shall be collected. Refer to VCRT 10.20.5 for additional information.

Document the vehicle as it is found. Measurements to place the vehicle at the scene shall be made using the triangulation method from at least two (2) points on the vehicle. These measurements shall be taken from two (2) fixed and permanent areas of reference at the scene.

Documentation should include but are not limited to:

- Note make, model, color, Vehicle Identification Number (VIN), license plate number, state of issue, and year of registration
- Note any exterior damage and exterior conditions of the vehicle
- Windows down/up
- Exterior wet/dry/condensation
- Tire conditions
- Note any interior damage and interior conditions of the vehicle
- Vehicle inventory including trunk or truck bed
- Position of the driver's seat
- Position/condition of the steering wheel
- Ignition switch intact/damaged/position
- Lights on/off
- Mileage and gas gauge
- Position of the gear shift
- Any odors present in the vehicle



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Multiple bullet impact points shall be marked for identification after initial overviews are taken to differentiate close-up photographs of individual bullet holes.

- Photographs shall be taken prior to and after insertion of trajectory rods into bullet holes
- Position of each impact point shall be measured and documented

Photograph the interior of the vehicle.

- Photograph each side with the door open
- Photograph the interior extensively such as driver's seat area, dashboard, steering column, instrument panel, rear seat, passenger seat, trunk, under hood, and upon opening any storage compartments

If the case warrants trace evidence as a concern, vacuuming of each seat may be collected immediately after photographs are taken.

VCRT Members shall collect the most fragile evidence prior to searching the entire vehicle. Evidence becomes fragile by the passing of time, exposure to the elements or environmental factors, movement, and improper handling. Depending on the type of crime being investigated and the circumstances in which the vehicle was involved, the collection of carpet and upholstery standards may be necessary.

An organized and systematic approach needs to be established. The vehicle may be divided into sections, similar to an organized zone search pattern, to ensure that all areas of the vehicle are searched. This may include underneath the exterior of the vehicle, under the hood, inside the trunk, underneath the seats, along the sides of the seats, inside all compartments (glove box, interior door side map compartments, center console, ashtrays), and underneath visors. Practice caution when searching underneath seats or in areas where it is difficult to see. Attempt to avoid blindly reaching into areas to avoid being punctured by a contaminated needle or injured by a hidden weapon. A small mirror and flashlight will help in searching these areas without risk of exposure.

An inventory of the contents of the vehicle and their approximate locations shall be conducted and recorded in the case notes.

Any blood located inside of the vehicle shall be collected when applicable. Some cases may warrant the use of Luminol processing for detection of blood evidence, especially in homicide cases where the original crime may have



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occurred inside the vehicle and cleaned up, or if the vehicle was used to transport the victim.

The following are examples of additional items that could be probative evidence found inside vehicles:

- Hair and fiber evidence
- Arson evidence
- Biological fluids – blood or semen
- Fired bullets or fragments
- Drinking containers
- Other specific physical evidence, e.g., burglary tools, weapons, drugs, paperwork, or stolen property specific to the crime

Known glass samples should be collected from all broken glass on the vehicle. Glass or plastic from broken headlights or tail lights shall be collected and preserved for possible physical matches to broken glass collected at any associated scenes.

Process the exterior and the interior for latent prints:
Exterior should include common sense areas that may have been touched.

- Trunk
- Door handles and door edges
- Fuel door
- Hood
- Roof support posts
- Windows

Interior should include common sense areas that may have been handled.

- Rear view mirrors
- Door handles
- Seat belt buckles
- Gear shift
- Windows
- Vanity mirrors
- Face of radio/console controls

Any areas of comparable value that can be collected shall be marked and photographed with a ruler included in the photograph. Refer to VCRT 10.34 Comparison Photography for additional information.



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Tire Test Impressions

If a test impression is needed for comparison purposes the following procedure may be followed.

- The vehicle tires need to be dry and at room temperature.
- Clean the tire with a cloth to remove loose dirt. Do not pry rocks out of tread and clean the floor where the art board is to be laid.
- Apply petroleum jelly sparingly to the complete width of the tire and as much of the circumference as possible.
- Position the art board and PUSH the car to record the first few feet of the tire impression. Stop Vehicle!!! Clean and apply petroleum jelly to the area of the tire that was on the ground when you began.
- Continue for almost one complete revolution. Stop and insert a third board (if needed for larger tires) and remove the first board (if necessary) to prevent front or rear tires from rolling over it.
- Document the art board with the tire information, the direction the vehicle would roll in a forward motion, the D.O.T. number, the laboratory case number (if available), examiners initials and the date.
- Dust the test impression with black magnetic fingerprint powder and cover the test impression with clear acetate (plastic) for protection.

Identify each inked tire tread print indicating:

- the direction of forward motion
- position of the tire on the vehicle (right front, left rear, etc.)
- date
- collector's initial
- Tire Information

As with any scene, detailed notes should be gathered to identify specific elements and information of both the scene and the vehicle.

Record the results of any presumptive tests or procedures in the notes, as well as the results of the controls.